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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,127	06/30/2003	Boris Ginzburg	P-5755-US	2994
27130 7590 04/03/2007 EITAN, PEARL, LATZER & COHEN ZEDEK LLP 10 ROCKEFELLER PLAZA, SUITE 1001 NEW YORK, NY 10020			EXAMINER SMITH, MARCUS	
			ART UNIT	PAPER NUMBER
			2616	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/03/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/608,127

Applicant(s)

GINZBURG ET AL.

Examiner

Marcus R. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/30/03, 11/15/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-9, 21, and 29-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Mahany (US 5,960,344) see IDS (11/15/04).

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with regard to claims 1 and 5, Mahany teaches (figure 6):

An apparatus comprising a media access controller (612) to control communication substantially simultaneously with a plurality of remote units over a plurality of channels (column 9, lines 20-30: And column 9, lines 60-65, states the access point can synchronize transmission, in which the examiner views as simultaneously communication.).

(second limitation in claim 5)

a plurality of omni-directional antennas (618 and 620) operable connected to said media access controller to transmit data over said plurality of channels, respectively (column 8, lines 60-67).

with regard to claims 2 and 6, Mahany teaches (figure 6):

further comprising a plurality of baseband processors (radios, 616 or 608) associated with said plurality of channels, respectively (column 8, lines 60-67).

with regard to claims 3-4 and 7-8, Mahany teaches (figure 6 and 1):

a processor (CPU processor as a the additional circuitry, 614) to process data for transmission by said media access controller (In figure 6, it states that the access point has additional circuitry. The examiner views the additional circuitry as the CPU processor, 13, in figure 1. In column 6, lines 22-45, CPU processor is connected to the MAC and it does processing of the incoming and outgoing information for the access point.).

with regard to claims 9, 21, and 29, Mahany teaches (figure 9):

A method comprising:

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switching a remote unit (922) in communication with a media access controller (processing unit in the access point, refer back to column 9, lines 20-30) from a first operating channel to a second operating channel, wherein communication between said remote unit and said media access controller is substantially uninterrupted (column 12, lines 10-27: It states that terminal can communicate to the access point on either channels, thus the access point can switch between to the first and second channels.).

(In column 9, lines 10-20, it states that the communication inside the access point can be circuitry or software routines. Thus the examiners views the processing unit is set of instructions.)

(other limitations to claim 29)

an access point (902) able to transmit data to a plurality of remote units (922 and 916) on a plurality of operating channels (first and second channels) (column 12, 23-30); and

a plurality of remote units able to receive said data (column 12, 23-30),

with regard to claim 30, Mahany teaches (figure 6):

The system of claim 29, wherein said access point comprises:

a media access controller (processing unit, 612: column 8, lines 35-50); and

a plurality of transceivers (radios, 608, 616) operably connected to said media access controller to transmit data to said remote units (column 8, lines 35-50).

with regard to claims 31, Mahany teaches (figure 1):

The system of claim 30, wherein said access point comprises a processor (CPU processor as a the additional circuitry, 614) to provide to said media access controller

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data for transmission to said remote units (In figure 6, it states that the access point has additional circuitry. The examiner views the additional circuitry as the CPU processor, 13, in figure 1. In column 6, lines 22-45, CPU processor is connected to the MAC and it does processing of the incoming and outgoing information for the access point.).

with regard to claims 32, Mahany teaches (figure 9):

The system of claim 29, wherein said access point is able to switch one of said plurality of remote units from a first operating channel to a second operating channel based on a parameter related to a load of remote units communicating with said access point on at least one of said first and second channels (column 12, lines 39-49: It teaches a message being routed from a portable terminal to an access points between to two channel cells (or paths). At the bottom paragraph, it teaches how the path is determined system conditions (parameter) like cell traffic, and other factors. Those parameters are can varying based on number of terminals.).

with regard to claims 33, Mahany teaches (figure 9):

The system of claim 29, wherein said access point is able to switch one of said plurality of remote units from a first operating channel to a second operating channel based on a parameter related to deterioration of a signal transmitted between said media access controller and said remote unit (column 12, lines 39-49: It teaches a message being routed from a portable terminal to an access points between to two channel cells (or paths). At the bottom paragraph, it teaches how the path is determined system conditions (parameter) like cell traffic, data rates, and other factors. The other factors could include the quality of signal (related to deterioration), in which it teaches

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how the access point switches between antennas based of the quality signal (column 6, lines 22-37).

4. Claims 9-14, 18-29, and 32-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Hansen et al. (US 7,158,759).

with regard to claims 9, 21, and 29, teaches (figure 1):

A method comprising:

switching a remote unit (22) in communication with a media access controller (processing module, 36) from a first operating channel to a second operating channel, wherein communication between said remote unit and said media access controller is substantially undisrupted (column 4, lines 42-50).

(other limitations to claim 29)

an access point (20) able to transmit data to a plurality of remote units (22-28) on a plurality of operating channels (column 3, 18-21, teaches all the stations communicate with the access points and lines 52-65, teaches that each Basic Service Set (BSS) operates on one single channel. In figure 1, access point, 20, shows that it communicate both BSSs which means it can operate in two channels.); and

a plurality of remote units able to receive said data (column 3, 18-21),

with regard to claims 10 and 22, teaches (figure 1):

comprising transmitting a channel switch request to said remote unit (column 4, lines 47-50).

with regard to claims 11 and 23, teaches (figure 1):

wherein transmitting a channel switch request comprises transmitting a parameter relating to a mode of communication between said media access controller and said remote unit (column 4, lines 42-50: Indicating another channel is parameter of the mode of communication).

with regard to claims 12 and 24, teaches (figure 1):

wherein transmitting a channel switch request comprises transmitting a parameter relating to said second operating channel (column 4, lines 42-50: the packet will have an indicator (parameter) relating to the different (second) channel.).

with regard to claims 13 and 26, teaches (figure 1):

wherein transmitting a channel switch request comprises transmitting a parameter relating to a counter (column 4, lines 42-50: The examiner views time as a parameter relating to a counter.).

with regard to claim 14:

comprising receiving from said remote unit a communication responsive to said channel switch request (column 9, lines 38-45: The examiner views the access point providing a selection packet to the station as a method of the access point transmitting and remote unit receiving the packet.).

with regard to claims 18, 26, and 32, teaches (figure 1):

wherein switching said remote unit comprises switching based on a parameter relating to a load of remote units communicating with said media access controller on at least one of said first and second channels (column 6, lines 43-56: The interference can

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be from another (BSS) on same channel, which increases the amount of remote units on that first channel.).

with regard to claims 19 and 27, teaches (figure 6):

wherein switching comprises switching communication between said remote unit and said media access controller from said first channel to said second channel if a load remote units communicating with said media access controller on said first channel is greater than a load of remote units communicating with said media access controller on said second channel (column 9 lines 60-67 and column 10 lines 1-10: Figure 6, determines which channel to use by picking the outage receive signal strength level (RSSI) that is greater than the target RSSI. The examiner views the higher RSSI is also indicated the lowest channel interference. Therefore, the new channel will have a lower interference level than first channel or the first channel has a higher interference level than the new channel.).

with regard to claims 20, 28, and 33, teaches (figure 1):

wherein switching said remote unit comprises switching based on a parameter (interference) relating to deterioration in a signal transmitted between said media access controller and said remote unit (column 4, lines 42-50).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al. (US 7,158,759) in view of McFarland et al. (US 6,870,815).

Hansen et al. discloses all of the subject matter as described above except for wherein receiving said communication responsive to said channel switch request comprises receiving a positive reply.

McFarland et al. teaches in figure 5, after the station receives a channel change frame, it sends its acknowledgement (step 502: column 14, lines 30-35) in order to avoid interference in the system and to inform the base station so it can synchronize the channel switch more quickly (column 1, lines 45-55).

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to the remote unit send an acknowledgement (positive reply) as taught by McFarland et al. in the system of Hansen et al. in order to avoid interference in the system.

7. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al. (US 7,158,759) in view of Jeoung (US 6,226,520).

Hansen et al. discloses all of the subject matter as described above except for receiving said communication responsive to said channel switch request comprises receiving a negative reply or comprises receiving a request for a different channel.

Jeoung teaches a method for a terminal and base station exchanging channel information. This method includes the base station sending changing request signal (Step 414) and the terminal can either sends call request with another traffic channel (404, then back to 403) or send a call request on that request traffic channel from base

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station (407, and 408) (column 3, lines 50-65 through column 4, lines 1-7). The terminal sending a call request from a channel different from the requested base station channel can be viewed as both a negative reply and a request for a different channel in order to use dynamic channel allocations, which require less engineering design, and makes the system more flexible to add or move terminals (column 1, lines 40-55).

Therefore it would have been obvious to one having ordinary skill in the art at the time invention was made to the remote unit sending different channel request after the change request signal has been sent by the base station as taught by Jeoung in the system of Hansen et al. in order to use dynamic channel allocations, which require less engineering design, and makes the system more flexible to add or move terminals.

Conclusion

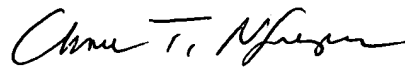
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus R. Smith whose telephone number is 571 270 1096. The examiner can normally be reached on Mon-Fri. 7:30 am - 5:00 pm every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRS 3/19/07



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